The precipitation for the month as a whole was heavy in most of Texas, where the monthly amounts ranged from 6 to 10 inches, and also in Oklahoma, western Kansas, and the eastern portions of Colorado and New Mexico, where they ranged from 4 to 6 inches or above. The amounts were also generous, ranging from 4 to 6 inches or more in the Lake region and the upper Mississippi and Missouri Valleys, while amounts ranging from 2 to 4 inches were received over practically all portions of the Plains region not previously mentioned. From 1 to 2 inches occurred in much of the Rocky Mountain and Plateau regions, but in the central and southern portions of the plateau and thence westward to the Pacific coast the amounts were quite generally less than 1 inch, but along the north Pacific coast they were slightly in excess of 2 inches. In the Atlantic coast districts, the central and east Gulf States, most of the Ohio and portions of the middle Mississippi Valleys the precipitation for the month was markedly deficient, less than 1 inch occurring over large portions of these districts, resulting in severe drought.

GENERAL SUMMARY.

The weather of the month was characterized by the sustained absence of rainfall with severe droughty conditions in the Southeastern States and portions of the Ohio and middle Mississippi valleys, and the excessive moisture received in the Southwest, especially Texas and Oklahoma. The month developed one of the severest spring droughts ever known in portions of the South Atlantic and East Gulf States, and other large areas of the droughty region suffered severely from lack of sufficient moisture, resulting in the delaying of farming operations and poor germination of such crops as could be planted. On the other hand, the excessive moisture in Texas and Oklahoma delayed field work and prevented proper cultivation of the soil.

In the principal corn and winter wheat growing States conditions were favorable in the States to westward of the Mississippi River and over the northern portions of the belt to the eastward, but dry weather prevailed in the southern portion of the eastern belt. In the spring-wheat region the weather was generally favorable and all vegetation made rapid growth.

Over the mountain and plateau districts of the West the weather was generally favorable and vegetation made satisfactory growth, but by the close of the month some dry-farming districts were needing rain. In the Pacific coast States the weather was favorable for all farming operations.

Average accumulated departures for May, 1914.

Districts.	Temperature.			Precipitation.			Cloudiness.		Relative humidity.	
	General mean for the current month.	Departure for the current month.	Accumulated departure since Jan. 1.	General mean for the current month.	Departure for the current month.	Accumulated departure since Jan. 1.	General mean for the current month.	Departure from the normal.	General mean for the current month.	Departure from the normal.
	° F.	° F.	° F.	Inches	Inches	Inches			P. ct.	P. ct.
New England	56.6	+2.0	− 5.9	2.08	−1.30	−1.10	5.1	−0.4	71	− 7
Middle Atlantic	64.4	+2.9	− 1.9	2.00	−1.50	−1.80	4.1	−0.9	61	−11
South Atlantic	71.1	+1.3	− 0.4	0.75	−3.00	−6.10	3.6	−0.9	64	−10
Florida Peninsula	77.9	+0.2	− 4.2	2.09	−2.20	−2.10	5.8	+1.4	76	0
East Gulf	72.9	+0.6	− 2.7	0.69	−2.80	−4.40	4.3	−0.4	62	− 9
West Gulf	72.0	−0.9	− 1.2	5.53	−1.40	−2.40	6.2	−1.4	78	+ 3
Ohio Valley and Tennessee	66.2	+1.1	− 2.5	1.74	−1.90	−5.00	4.1	−0.9	61	− 7
Lower Lakes	59.2	+1.7	− 5.3	3.62	+0.50	+1.50	4.3	−1.1	67	− 4
Upper Lakes	56.3	+3.7	+ 1.4	3.28	−0.20	−0.50	4.5	−1.0	68	− 4
North Dakota	55.6	+1.4	+11.1	1.92	−0.60	−1.30	4.2	−1.3	64	+ 2
Upper Mississippi Valley	64.3	+2.3	+ 6.8	2.68	−1.50	−3.50	4.4	−0.9	63	− 5
Missouri Valley	63.1	+1.1	+10.7	3.03	−1.20	−2.30	5.1	0.0	65	0
Northern slope	54.0	+1.0	+14.0	1.42	−0.70	−1.50	5.1	−0.4	62	+ 4
Middle slope	62.6	−0.2	+ 9.5	3.60	−0.20	−1.20	5.6	+0.7	68	+ 7
Southern slope	68.7	−2.0	+ 5.3	6.16	+3.30	+1.40	5.8	+1.4	70	+ 9
Southern Plateau	65.6	−0.4	+ 4.7	0.77	+0.50	−0.10	3.2	+0.5	42	+10
Middle Plateau	59.1	+2.9	+11.0	0.69	−0.50	−0.10	4.4	+0.3	46	0
Northern Plateau	59.4	+3.5	+17.7	0.91	−0.80	−1.20	4.5	+0.6	53	− 3
North Pacific	55.7	+2.5	+14.5	1.17	−1.40	+0.20	4.9	−1.4	74	− 2
Middle Pacific	58.3	+0.7	+10.1	0.50	−0.80	−0.80	4.6	+0.6	72	+ 1
South Pacific	61.8	+0.2	+14.8	0.14	−0.40	+3.80	5.2	+1.1	72	+ 3

Maximum wind velocities, May, 1914.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
		mis./hr.				mis./hr.	
Buffalo, N. Y.	26	54	sw.	New York, N. Y.	27	90	nw.
Do.	27	58	sw.	Pittsburgh, Pa.	11	68	nw.
Corpus Christi, Tex.	3	52	e.	Do.	12	57	nw.
Duluth, Minn.	25	56	sw.	Do.	27	57	w.
El Paso, Tex.	29	60	e.	Point Reyes Light, Cal.	27	65	nw.
Hatteras, N. C.	5	55	w.	Savannah, Ga.	7	70	w.
Houghton, Mich.	25	50	nw.	Sioux City, Iowa.	23	51	w.
Louisville, Ky.	7	60	w.	Syracuse, N. Y.	27	54	sw.
Mt. Weather, Va.	5	52	nw.	Valentine, Nebr.	25	52	sw.
New York, N. Y.	1	50	nw..				
Do.	23	51	nw.				

CONDENSED CLIMATOLOGICAL SUMMARY.

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data, as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course the number of such records is smaller than the total number of stations.

Summary of temperature and precipitation, by sections, May, 1914.

Section.	Temperature (°F.).								Precipitation (inches and hundredths).					
	Section average.	Departure from the normal.	Monthly extremes.						Section average.	Departure from the normal.	Greatest monthly.		Least monthly.	
			Station.	Highest.	Date.	Station.	Lowest.	Date.			Station.	Amount.	Station.	Amount.
Alabama	71.8	+0.4	Wetumpka	104	30	2 stations	42	9	1.05	−2.99	Cordova	3.30	Daphne	T.
Arizona	67.6	+1.7	Maricopa	110	21	Alpine	18	1	0.32	+0.05	St. Johns	2.15	7 stations	0.00
Arkansas	69.5	+0.3	2 stations	97	26†	Dutton	34	9	3.34	−2.16	Wiggs	6.92	Corning	1.02
California	62.3	+0.2	Greenland Ranch	116	29	Tamarack	20	9†	0.69	−0.53	Kennett	4.66	31 stations	0.00
Colorado	53.1	+1.1	Wray	96	26	Fraser	3	1	2.51	+0.70	Campo	13.77	Woodmen Sanatorium.	0.10
Florida	75.8	+0.3	Mount Pleasant	104	31	2 stations	45	9†	1.74	−2.09	Homestead	6.65	3 stations	0.00
Georgia	72.7	+0.9	Waynesboro	104	29	Blue Ridge	36	10	0.74	−2.73	Quitman	2.99	Waynesboro	0.00
Hawaii (for April)	70.1	.....	Mahukona	89	13	Waimea	47	7	7.45	.....	Waiakamoi	37.86	Makapun	0.23
Idaho	56.5	+2.7	2 stations	100	31	Challis	16	5	1.27	−0.48	Castle Creek	3.65	Shoshone	0.17
Illinois	65.3	+2.4	Golconda	97	26	Joliet	29	2	2.32	−1.65	Antioch	6.76	Fairfield	0.12
Indiana	64.6	+3.1	Shoals	100	30	3 stations	29	1†	2.64	−1.41	Knox	8.15	Decker	0.34
Iowa	62.2	+1.7	Cedar Rapids	96	26	Washta	25	13	3.31	−1.26	Fairfield	6.90	Leon	0.30
Kansas	64.3	+0.6	Wallace	98	9	4 stations	28	13	3.35	−0.89	Minneola	8.16	Lawrence	0.64
Kentucky	66.5	+0.8	Beaver Dam	103	28	Greensburg	32	1	2.16	−1.76	Bowling Green	4.65	Louisville	0.65
Louisiana	73.8	−0.3	Angola	99	31	Collinston	43	9	2.33	−1.42	Lake Charles	10.11	Hammond	T.
Maryland & Delaware	65.2	+1.9	Cambridge	100	27	Deer Park	18	1	2.06	−1.57	State Sanatorium	4.24	Wilmington	0.89
Michigan	57.0	+3.1	Bay City	94	29	3 stations	20	3†	3.37	+0.15	Allegan	11.34	Iron Mountain	0.43
Minnesota	57.6	+3.1	Tracy	103	26	2 stations	20	12†	2.89	−0.56	Worthington	6.85	State Sanatorium	0.30
Mississippi	71.5	−0.4	Columbus	100	30	Porterville	40	14	1.83	−2.59	Greenville	5.30	Pascagoula	0.00
Missouri	66.6	+2.0	Grant City	98	26	Cassville	31	9	1.47	−3.40	Dean	4.71	Wheatland	0.16
Montana	52.5	+1.3	4 stations	91	31	2 stations	15	5†	1.89	−0.54	Highwood	4.28	Medicine Lake	0.25
Nebraska	60.7	+1.4	Ewing	100	26	Hillside	22	8	2.68	−0.87	Norfolk	5.98	Scottsbluff	0.72
Nevada	59.4	+3.5	Leeland	111	21	Geyser	10	2	0.53	−0.43	Jack Creek	2.12	6 stations	0.00
New England	56.8	+1.7	Durham, N. H.	99	27	Keene, N. H.	21	2	2.15	−1.46	Hyannis, Mass	4.79	Burlington, Vt.	0.36
New Jersey	63.1	+2.8	4 stations	98	27	2 stations	30	1	2.57	−1.30	Sussex	5.09	Bridgeton	0.95
New Mexico	60.1	+0.1	Almagordo (near)	99	29	Luna	15	2	2.62	+1.14	Portales	12.67	2 stations	0.03
New York	58.0	+2.1	2 stations	98	27	2 stations	20	1†	3.08	−0.06	Allegany	7.50	Harkness	0.44
North Carolina	67.9	+0.6	5 stations	101	28	Banner Elk	29	2	1.38	−2.76	Newbern	3.55	Elizabethtown	0.00
North Dakota	55.2	+3.1	3 stations	95	24†	McLeod	16	16	2.12	−0.45	Turtle Lake	4.21	Howard	0.86
Ohio	62.2	+1.4	Brilliant	102	29	Lisbon	26	1†	3.11	−0.36	Antwerp	8.45	Dayton	0.94
Oklahoma	66.9	−0.6	Goodwell	96	10	Newkirk	36	13	5.16	−0.76	Geary	8.67	Stillwater	2.04
Oregon	56.7	+3.3	Cliff	98	30	Whitaker	8	4	1.46	−0.90	Waldo Lake	3.80	Prineville	0.06
Pennsylvania	61.5	+1.6	3 stations	96	26†	2 stations	19	1	3.34	−0.53	Lawrenceville	6.52	Philadelphia	0.90
Porto Rico	76.7	−0.4	Canóvanas	96	2	.....do	52	5†	11.42	+3.99	Rio Grande	28.85	Santa Isabel	2.36
South Carolina	72.1	+0.6	2 stations	105	28	.....do	42	3	0.83	−2.54	Ferguson	2.70	Edgefield	0.00
South Dakota	57.5	+1.5	Timber Lake	98	30	Sorum	22	12	3.10	+0.48	Forestburg	8.94	Pine Ridge	0.70
Tennessee	67.5	+0.4	Dunlap	101	29	Mountain City	33	2†	2.19	−1.86	Johnsonville	4.73	Chattanooga	0.57
Texas	71.3	−1.5	Eagle Pass	105	5†	4 stations	40	12†	7.68	+4.14	Beaumont	19.35	Alpine	0.50
Utah	58.2	+3.0	St. George	101	29	Fruitland	17	5	0.65	−0.61	Lower Mill Creek	2.11	4 stations	0.00
Virginia	65.6	+1.6	2 stations	98	27†	Mount Weather	26	4	1.64	−2.40	Petersburg	3.73	Radford	0.58
Washington	57.1	+2.3	Prosser	98	31	Republic	16	28	1.14	−1.05	Quinimaut	3.65	Eltopia	0.08
West Virginia	62.4	+0.1	2 stations	100	29	Marlinton	23	1	1.96	−2.03	Point Pleasant	3.70	2 stations	0.55
Wisconsin	57.8	+2.9	New Richmond	98	25	Ashland (1)	20	12†	3.53	−0.20	Cottage Grove	8.54	Hayward	0.19
Wyoming	50.1	+2.2	Wheatland	92	30	Thumb, Y. N. P.	4	5	1.47	−0.84	Bechler River, Y. N. P.	3.74	Basin	0.17

DESCRIPTION OF TABLES AND CHARTS.

Table I gives the data ordinarily needed for climatological studies for about 158 Weather Bureau stations making simultaneous observations at 8 a. m. and 8 p. m., seventy-fifth meridian time daily, and for about 41 others making only one observation. The altitudes of the instruments above ground are also given.

Table II gives a record of precipitation the intensity of which at some period of the storm's continuance equaled or exceeded the following rates:

Duration (minutes)	5	10	15	20	25	30	35	40	45	50	60
Rates per hour (inches)	3.00	1.80	1.40	1.20	1.08	1.00	0.94	0.90	0.87	0.84	0.80

In cases where no storm of sufficient intensity to entitle it to a place in the full table has occurred, the greatest precipitation of any single storm has been given, also the greatest hourly fall during that storm.

Table III gives, for about 30 stations of the Canadian Meteorological Service, the means of pressure and temperature, total precipitation and depth of snowfall, and the respective departures from normal values, except in the case of snowfall.

Chart I.—Hydrographs for several of the principal rivers of the United States.

Chart II.—Tracks of centers of high areas; and

Chart III.—Tracks of centers of low areas. The roman numerals show the chronological order of the centers. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the observations at 8 a. m and 8 p. m., seventy-fifth meridian time. Within each circle is also given (Chart II) the last three figures of the highest barometric reading and (Chart III) the lowest reading reported at or near the center at that time, and in both cases as reduced to sea level and standard gravity.

Chart IV.—Total precipitation. The scale of shades showing the depth is given on the chart. Where the monthly amounts are too small to justify shading, and over sections of the country where stations are too widely separated or the topography is too diversified to warrant reasonable accuracy in shading, the actual depths are given for a limited number of representative stations. Amounts less than 0.005 inch are indicated by the letter T, and no precipitation by 0.

Chart V.—Percentage of clear sky between sunrise and sunset. The average cloudiness at each Weather Bureau station is determined by numerous personal observations between sunrise and sunset. The difference between the observed cloudiness and 100 is assumed to represent the percentage of clear sky, and the values thus obtained are the basis of this chart. The chart does not relate to the nighttime.

Chart VI.—Isobars and isotherms at sea level and prevailing wind directions. The pressures have been reduced to sea level and standard gravity by the method described by Prof. Frank H. Bigelow on pages 13–16 of